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WILMER CUTLER PICKERING HALE AND DORR LLP
COLUMBIA UNIVERSITY
399 PARK AVENUE
NEW YORK, NY 10020

EXAMINER	
SHAW, PELING ANDY	

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/775,347	YEMINI ET AL.	
	Examiner	Art Unit	
	Peling A. Shaw	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

1. Amendment received on 06/20/2006 has been entered into record. No claim is amended. Claims 1-40 are currently pending.

2. Amendment received on 03/22/2005 was entered. Claims 1, 15, 31 and 36 were amended.

Priority

3. This application has claimed the benefits of 60/179,884 filed on 02/02/2000 and 60/216,403 filed on 07/06/2000. The filing date is 02/01/2001.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US 5870564 A), hereinafter referred as Jensen.

a. Regarding claim 1, Jensen disclosed a network comprising a plurality of Nodes interconnected by Links (Fig. 2, items 140, 142 and 144: connectors; column 6, lines 38-44: communication links, edges, connectors; column 14, line 62-column 15, line 2: connectors), wherein: (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes (abstract; column 6, line 65-column 7, line 8: mathematical nodes, edges in Cartesian grid; column 7, lines 52-63; column 8, lines 9-13 and 42-46: potential paths; column 18, lines 19-34: On the other hand, the granule 176b along with its edge 178b and

underlying or previous granule 172a remain in consideration for inclusion in a potential path, by virtue of the favorable potential edges 182c, 182d, and 182e.); (b) at least one of said set of one or more coordinate labels is additionally comprised of service information (column 3, lines 46-54: wherein each edge has a state associated therewith and represented by data corresponding to a capacity, distance, or other measure or metric associated with the edge); (c) each coordinate label is unique to the Node to which it is assigned (column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology; column 7, lines 52-63: determining a near-optimal path limits the potential paths, evaluates currently acceptable potential path segments or edges); and (d) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node (column 4, lines 25-44: determining an improved path, evaluate a path segment by assessing the benefit of a net path including the path segment and a potential future path segment depending on the path segment, where a path segment is an edge between adjacent granules in a network, and wherein all costs, distances, measures, metrics, capacities, and the like, along a path between the adjacent granules are associated with the edge there between; column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology).

b. Regarding claim 2, Jensen disclosed the network of claim 1 wherein one or more of said set of one or more coordinate labels is changed after a predetermined or random interval of time (column 3, lines 54-60: storing state data associated with the states of

a plurality of edges in a network that may be represented as a connected graph, such that the state data is stored in a memory device to be retrievable and periodically updatable).

c. Regarding claim 3, Jensen disclosed the network of claim 1 wherein said service information includes a bandwidth for at least one of said one or more Links (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules).

d. Regarding claim 4, Jensen disclosed the network of claim 1 wherein said service information includes a bandwidth for at least one of said plurality of Nodes (column 4, lines 16-24: granule management effective to provide data associated with a grouping of individual nodes agglomerated into granules, the granules being interconnected into a network represented by a connected graph).

e. Regarding claim 5, Jensen disclosed the network of claim 1 wherein said service information includes a cost metric (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules).

f. Regarding claim 6, Jensen disclosed the network of claim 1 wherein said service information includes a delay metric (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 26, lines 62-63: If the space S represents some real time communications network, path length may correspond to transmission time; column

28, lines 19-25: By "no forward progress" may be meant that the method "backing up" more than it is going forward, is not "on average" getting any closer to y, or has exceeded some time limit without reaching y.).

g. Regarding claim 7, Jensen disclosed the network of claim 1 wherein said service information includes a physical distance metric (column 7, lines 9-17: distance in mathematics; claim 4: define a metric space representing the connections and metrics associated with the granules and physical connections between the granules).

h. Regarding claim 8, Jensen disclosed the network of claim 1 wherein said service information includes a load metric (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules).

i. Regarding claim 9, Jensen disclosed the network of claim 1 wherein said service information includes Quality of Service information (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules).

j. Regarding claim 11, Jensen disclosed the network of claim 1 wherein said service information is comprised of information for balancing a data load on said network (column 11, lines 54-67: load manager).

k. Regarding claim 12, Jensen disclosed the network of claim 1 wherein said service information is comprised of information for controlling a flow of data on said network (column 4, lines 16-24: updating a load space with data representing changes

in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules; column 28, lines 13-25: Avoiding Cul-de-sacs, By "no forward progress" may be meant that the method "backing up" more than it is going forward).

l. Regarding claim 13, Jensen disclosed the network of claim 1 wherein said service information is comprised of information for diagnosing and repairing a problem on said network (column 12, lines 53-56: a path finder may receive data 28 from the load space 32 in order to solve the path problem).

Jensen disclosed all limitations of claims 1-9 and 11-13. Claims 1-9 and 11-13 are rejected under 35 U.S.C. 102(b).

5. Claims 15-19, 22-24 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US 5870564 A), hereinafter referred as Jensen.

a. Regarding claim 15, Jensen disclosed a network comprising a plurality of Nodes interconnected by Links (Fig. 2, items 140, 142 and 144: connectors; column 6, lines 38-44: communication links, edges, connectors; column 14, line 62-column 15, line 2: connectors), wherein: (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes (abstract, column 6, line 65-column 7, line 8: mathematical nodes, edges in Cartesian grid; column 7, lines 52-63, column 8, lines 9-13, column 18, lines and 42-46: potential paths; column 18, lines 19-34: On the other hand, the granule 176b along with its edge 178b and underlying or previous granule 172a remain in consideration for inclusion in a potential path, by virtue of the favorable potential edges 182c, 182d,

and 182e.); (b) each coordinate label is unique to the Node to which it is assigned (column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology; column 7, lines 52-63: determining a near-optimal path limits the potential paths, evaluates currently acceptable potential path segments or edges); (c) at least one path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels assigned to said first Node and one of said coordinate labels assigned to said second Node (column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology; column 4, lines 25-44: determining an improved path, evaluate a path segment by assessing the benefit of a net path including the path segment and a potential future path segment depending on the path segment, where a path segment is an edge between adjacent granules in a network, and wherein all costs, distances, measures, metrics, capacities, and the like, along a path between the adjacent granules are associated with the edge there between; ; column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology); and (d) a preferred path between said first Node and said second Node is selected from a set of one or more possible paths based upon a predetermined routing objective (column 7, lines 52-57: determining a near-optimal path limits the potential paths).

b. Regarding claim 16, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to maximize a bandwidth of a routing path (column 6, lines 54-64: define a maximum bandwidth, The bandwidth may be one

property that could be associated with speed, message traffic volume, cost, or other capacity.).

c. Regarding claim 17, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to maximize a bandwidth of a routing Node (column 4, lines 16-24: granule management effective to provide data associated with a grouping of individual nodes agglomerated into granules, the granules being interconnected into a network represented by a connected graph; column 6, lines 54-64: define a maximum bandwidth, The bandwidth may be one property that could be associated with speed, message traffic volume, cost, or other capacity.).

d. Regarding claim 18, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to maximize a bandwidth of a routing Link (column 6, lines 54-64: define a maximum bandwidth, The bandwidth may be one property that could be associated with speed, message traffic volume, cost, or other capacity.).

e. Regarding claim 19, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to minimize a routing path cost (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path).

f. Regarding claim 22, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to minimize a physical distance (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path).

g. Regarding claim 23, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to minimize a routing load (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules; column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path).

h. Regarding claim 24, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to minimize a routing path delay (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path; column 26, lines 62-63: If the space S represents some real time communications network, path length may correspond to transmission time; column 28, lines 19-25: By "no forward progress" may be meant that the method "backing up" more than it is going forward, is not "on average" getting any closer to y, or has exceeded some time limit without reaching y.).

i. Regarding claim 27, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to assure a level of Quality of Service (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules; column 6, line 65-column 7, line 8: can define a

property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path).

j. Regarding claim 28, Jensen disclosed the network of claim 27 where said level Quality of Service is determined based on a need of a user (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes).

k. Regarding claim 29, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to minimize a delay in accessing one of said plurality of Nodes (column 6, line 65-column 7, line 8: can define a property called distance to be the best value of any performance parameter between two nodes; column 7, lines 9-17: shortest path; column 26, lines 62-63: If the space S represents some real time communications network, path length may correspond to transmission time; column 28, lines 19-25: By "no forward progress" may be meant that the method "backing up" more than it is going forward, is not "on average" getting any closer to y, or has exceeded some time limit without reaching y.).

l. Regarding claim 30, Jensen disclosed the network of claim 15 wherein said predetermined routing objective is to balance a load among different paths to access one of said plurality of Nodes (column 7, lines 52-63: determining a near-optimal path limits the potential paths, evaluates currently acceptable potential path segments or edges; column 11, lines 54-67: load manager).

Jensen disclosed all limitations of claims 15-19, 22-24 and 27-30. Claims 15-19, 22-24 and 27-30 are rejected under 35 U.S.C. 102(b).

6. Claims 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US 5870564 A), hereinafter referred as Jensen.

a. Regarding claim 31, Jensen disclosed a method for determining a path from a source Node to a destination Node in a network comprising a plurality of Nodes interconnected by Links (Fig. 2, items 140, 142 and 144: connectors; column 6, lines 38-44: communication links, edges, connectors; column 14, line 62-column 15, line 2: connectors), said Nodes including a first Node, and a plurality of second Nodes, said second Nodes including said source Node and destination Node, said method comprising the steps of: (a) assigning to each of said second Nodes, including said source Node and said destination Node, one or more coordinate labels, each coordinate label assigned to a second Node representing a path through said network from said second Node to said first Node (abstract; column 6, line 65-column 7, line 8: mathematical nodes, edges in Cartesian grid; column 7, lines 52-63, column 8, lines 9-13, column 18, lines and 42-46: potential paths; column 18, lines 19-34: On the other hand, the granule 176b along with its edge 178b and underlying or previous granule 172a remain in consideration for inclusion in a potential path, by virtue of the favorable potential edges 182c, 182d, and 182e.); (b) including in at least one of said one or more coordinate labels service information (column 3, lines 46-54: wherein each edge has a state associated therewith and represented by data corresponding to a capacity, distance, or other measure or metric associated with the edge); and (c) determining a path from said source Node to said destination Node by combining one coordinate label of said source Node and one coordinate label of said destination

Node (column 4, lines 25-44: determining an improved path, evaluate a path segment by assessing the benefit of a net path including the path segment and a potential future path segment depending on the path segment, where a path segment is an edge between adjacent granules in a network, and wherein all costs, distances, measures, metrics, capacities, and the like, along a path between the adjacent granules are associated with the edge there between; column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology).

b. Regarding claim 32, Jensen disclosed the method of claim 31 wherein said service information contains information for balancing a data load on said network (column 11, lines 54-67: load manager).

c. Regarding claim 33, Jensen disclosed the method of claim 31 wherein said service information is comprised of information for controlling a flow of data on said network (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules; column 28, lines 13-25: Avoiding Cul-de-sacs, By "no forward progress" may be meant that the method "backing up" more than it is going forward).

d. Regarding claim 34, Jensen disclosed the method of claim 31 wherein said service information is comprised of information for diagnosing and repairing a problem on said network (column 12, lines 53-56: a path finder may receive data 28 from the load space 32 in order to solve the path problem).

Jensen disclosed all limitations of claims 31-34. Claims 31-34 are rejected under 35 U.S.C. 102(b).

7. Claims 36-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Jensen et al. (US 5870564 A), hereinafter referred as Jensen.

a. Regarding claim 36, Jensen disclosed a Node for use in a network, said network comprising a plurality of Nodes connected by Links (Fig. 2, items 140, 142 and 144: connectors; column 6, lines 38-44: communication links, edges, connectors; column 14, line 62-column 15, line 2: connectors), wherein: said Node for use in said network has one or more coordinate labels assigned thereto, each coordinate label representing a path from said Node to a particular other, non-adjacent Node of said network, and where at least one of said one or more coordinate labels is further comprised of service information, each of said coordinate labels being unique to said Node (column 4, lines 25-44: determining an improved path, evaluate a path segment by assessing the benefit of a net path including the path segment and a potential future path segment depending on the path segment, where a path segment is an edge between adjacent granules in a network, and wherein all costs, distances, measures, metrics, capacities, and the like, along a path between the adjacent granules are associated with the edge there between; column 6, line 65-column 7, line 17: mathematical nodes, edges in Cartesian grid, distance parameter, topology).

b. Regarding claim 37, Jensen disclosed the Node of claim 36 wherein said service information is comprised of information for balancing a data load on said network (column 11, lines 54-67: load manager).

c. Regarding claim 38, Jensen disclosed the Node of claim 36 wherein said service information is comprised of information for controlling a flow of data on said network (column 4, lines 16-24: updating a load space with data representing changes in a metric, such as a distance, cost, capacity, bandwidth, or the like associated with an edge interconnecting adjacent granules; column 28, lines 13-25: Avoiding Cul-de-sacs, By "no forward progress" may be meant that the method "backing up" more than it is going forward).

d. Regarding claim 39, Jensen disclosed the Node of claim 36 said service information is comprised of information for diagnosing and repairing a problem on said network (column 12, lines 53-56: a path finder may receive data 28 from the load space 32 in order to solve the path problem).

Jensen disclosed all limitations of claims 36-39. Claims 36-39 are rejected under 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10, 14, 25-26, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. (US 5870564 A), hereinafter referred as Jensen in view of Bosack (US

5088032 A), hereinafter referred as Bosack and Dolev et al. (US 5161186 A), hereinafter referred as Dolev.

a. Jensen shows claims 1, 15, 31 and 36 as above. Jensen does not show (claim 10) wherein said service information includes a Link security classification.

b. Bosack shows (claim 10) wherein said service information includes a Link security classification (claim 36: wherein said plurality of routing data items comprises at least one of the group: delay time, bandwidth, reliability, channel occupancy, and security) in an analogous art for the purpose of routing communications among computer networks.

c. Neither Jensen nor Bosack shows (claim 14) wherein said service information is comprised of information controlling access to a payload of said data.

d. Dolev shows (claim 14) wherein said service information is comprised of information controlling access to a payload of said data (column 1, lines 13-14: maintain security between network nodes) in an analogous art for the purpose of secure and private communication in a triple-connected network.

e. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Jensen's functions of near-optimization path finding with Bosack's functions of selecting routes based upon security and Dolev's functions of securing connections between nodes.

f. The modification would have been obvious because one of ordinary skill in the art would have been motivated to have security consideration per Bosack and Dolev's teaching in route selection per both Jensen and Bosack's teaching.

g. Claims 25-26, 35 and 40 are of the same scope as claims 10 and 14. These are rejected for the same reasons as for claims 10 and 14.

Together Jensen, Bosack and Dolev disclosed all limitations of claims 10, 14, 25-26, 35 and 40. Claims 10, 14, 25-26, 35 and 40 are rejected under 35 U.S.C. 103(a).

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. (US 5870564 A), hereinafter referred as Jensen in view of Simmons (US 6597658 B1), hereinafter referred as Simmons.

a. Jensen shows claim 15 as above. Jensen does not show (claim 20) wherein said predetermined routing objective is for said path to use a given optical wavelength.

b. Simmons shows (claim 20) wherein said predetermined routing objective is for said path to use a given optical wavelength (column 4, lines 3-22: ADM is used to add or drop upon certain wavelength) in an analogous art for the purpose of hierarchical telecommunications network with fault recovery.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Jensen's functions of near-optimization path finding with Simmons' hierarchical network using optical transport.

d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to include optical transport per Simmons' teaching in route selections per both Jensen and Simmons' teaching.

Together Jensen and Simmons disclosed all limitations of claim 20. Claim 20 is rejected under 35 U.S.C. 103(a).

Response to Arguments

10. Applicant's arguments filed on 06/20/2006 have been fully considered, but they are not persuasive.

a. Applicant alleges that examiner does not show the support of "coordinate labels" and fails to address how any coordinate labels are shown in Jensen. Examiner has reviewed applicant's original specification and claim language, and Jensen. Examiner has identified the references in Jensen with respect to using coordinate labels and updated the claim rejection in item a's, sections 4, 5, 6 and 7. Jensen has shown (column 6, line 65-column 7, line 17) using mathematical nodes, mathematical edges in connected graphs in a simple graph in a Cartesian grid and defining mathematical edges as connection between nodes, and defining distance between nodes. This should show that Jensen does have the support of "coordinate labels".

b. Jensen has shown all limitations of applicant's claimed invention. Applicant did not amend the claim language to distinguish the claimed invention over the cited prior art, particularly Jensen. As it is Applicant's right to claim as broadly as possible their invention, it is also the Examiner's right to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique (see items a's in section sections 4, 5, 6 and 7). As Jensen has shown that it is well known in using mathematical graphic functions to describe the network topology, i.e. nodes and connections. It is clear that Applicant must be able to submit claim language to distinguish over the

prior arts used in the above rejection sections that discloses distinctive features of Applicant's claimed invention. It is suggested that Applicant compare the original specification and claim language with the cited prior art used in the rejection section above or the Remark section below to draw an amended claim set to further the prosecution.

c. Failure for Applicant to narrow the definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant's intent to broaden claimed invention. Examiner interprets the claim language in a scope parallel to the Applicant in the response. Examiner reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Remarks

11. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

a. Aggarwal et al. (US 6717921 B1) Method for configuring a shared tree for routing traffic in a multicast conference

b. Beshai et al. (US 6667956 B2) Multi-class network

c. Yamazaki (US 5655134 A) Network structure storing and retrieval method for a data processor

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the statu9s of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER